

WHAT IS CLAIMED:

1. A router comprising:

a routing component that implements routing protocols for data processed by the router; and

an interface component through which a user may view and modify features of the router, the interface component presenting the features of the router to the user as a hierarchical tree having attributes that store values relating to the router protocols and components that represent functionality of the router protocols, the components containing one or more sub-components or attributes.

2. The router of claim 1, wherein the interface component is accessible by a user through a command-line interface.

3. The router of claim 1, wherein the interface component is accessible by a user through a graphical interface.

4. The router of claim 1, wherein the interface component updates the router component in real-time to reflect changes made by the user to the attributes or the components.

5. The router of claim 1, wherein the router is a dedicated hardware router.

6. The router of claim 1, wherein the router is a general purpose computer.

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A1

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B' 7

7. A method comprising:

organizing features relating to routing protocols of a router into a hierarchically formatted component tree;

presenting a portion of the hierarchically formatted component tree to a user in response to a first command from the user;

modifying the component tree in response to a second command from the user; and

updating, in real-time, features of the router relating to the routing protocol that were changed by the user when modifying the component tree.

8. The method of claim 7, wherein the hierarchical component tree

includes attributes that store values relating to the routing protocols and components that represent functionality of the routing protocols, the components containing one or more sub-components or attributes.

9. The method of claim 7, wherein the first command is a display command.

10. The method of claim 7, wherein the second command is a set preference command.

11. The method of claim 7, wherein the user inputs the first and second commands via a command-line interface.

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12. The method of claim 7, wherein the user inputs the first and second commands via a graphical interface.

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13. A computer readable medium containing instructions for execution by a processor, the instructions, when executed:

organizing features relating to routing protocols of a router into a hierarchically formatted component tree;

presenting a portion of the hierarchically formatted component tree to a user in response to a first command from the user;

modifying the component tree in response to a second command from the user; and

updating, in real-time, features of the router relating to the routing protocol that were changed by the user when modifying the component tree.

14. The computer readable medium of claim 13, wherein the hierarchical component tree includes attributes that store values relating to the routing protocols and components that represent functionality of the routing protocols, the components containing one or more sub-components or attributes.

15. The computer readable medium of claim 13, wherein the first command is a display command.

16. The computer readable medium of claim 13, wherein the second command is a set preference command.

17. The computer readable medium of claim 13, wherein the user inputs the first and second commands via a command-line interface.

SECRET

18.

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